

## INTERNATIONAL SEARCH REPORT

International Application No

PCT/EP2004/003518

**A. CLASSIFICATION OF SUBJECT MATTER**

IPC 7 A61K31/498 A61K31/55 A61K45/06 A61P25/08

According to International Patent Classification (IPC) or to both national classification and IPC

**B. FIELDS SEARCHED**

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 A61K A61P

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, EMBASE, PAJ, BIOSIS, CHEM ABS Data

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	<p>DATABASE WPI            Section Ch, Week 200066            Derwent Publications Ltd., London, GB;            Class B05, AN 2000-673134            XP002291965            &amp; CN 1 265 889 A (WANG X)            13 September 2000 (2000-09-13)            abstract</p> <p>-----</p> <p>ERNST MUTSCHLER: "Arzneimittelwirkungen - Lehrbuch der Pharmakologie und Toxikologie"            1997, WISSENSCHAFTLICHE VERLAGSGESELLSCHAFT MBH STUTTGART , STUTTGART , XP002291963            page 252 - page 260            in particular p. 260</p> <p>-----</p> <p>-/-</p>	1-3,8-13
X		1-3,8-13

Further documents are listed in the continuation of box C.

Patent family members are listed in annex.

## ° Special categories of cited documents :

- \*A\* document defining the general state of the art which is not considered to be of particular relevance
- \*E\* earlier document but published on or after the international filing date
- \*L\* document which may throw doubts on priority, claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- \*O\* document referring to an oral disclosure, use, exhibition or other means
- \*P\* document published prior to the international filing date but later than the priority date claimed

- \*T\* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- \*X\* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- \*Y\* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- \*&\* document member of the same patent family

Date of the actual completion of the International search

16 August 2004

Date of mailing of the International search report

06/09/2004

Name and mailing address of the ISA

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## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	MARK H. BEERS, M.D., ROBERT BERKOW, M.D.: "The Merck Manual" 1999, MERCK RESEARCH LABORATORIES, WHITEHOUSE STATION, N.J. , XP002291964 page 1406 - page 1408 -----	1-4,8-13
X	DAM M: "SUMMING UP OF THE SUCCESS SO FAR GAINED THROUGH CHOICE OF DRUGS OR COMBINATIONS OF DRUGS" ACTA NEUROLOGICA SCANDINAVICA SUPPLEMENTUM, vol. 69, no. 99, 1984, pages 19-22, XP009035076 & 3RD WORKSHOP ON MEMORY FUNCTIONS, GOTHENBURG, FEB. 4-6, 1983. ACTA NEUROL SCAND SUPPL. ISSN: 0065-1427 page 19 -----	1-3,8-13
X	US 5 095 033 A (LEVY RENE H ET AL) 10 March 1992 (1992-03-10) column 1, line 39 - column 2, line 34 claims -----	1-3,8-13
X	WO 89/05642 A (FERKANY JOHN W ; PONTECORVO MICHAEL J (US)) 29 June 1989 (1989-06-29) page 6, last paragraph - page 7, paragraph 1 page 8 claims -----	1-3,8-13
X	GB 864 536 A (SAPOS S A LAB) 6 April 1961 (1961-04-06) page 2, left-hand column claims 2,3 -----	1,2,8-13
X	US 3 489 836 A (WARING WILSON SHAW) 13 January 1970 (1970-01-13) abstract column 3, line 56 - line 59 -----	1,2,8-13
X	EP 0 637 449 A (SIGMA TAU IND FARMACEUTI) 8 February 1995 (1995-02-08) abstract column 3, line 25 - line 33 -----	1,2,8-13
X	WO 01/39779 A (LAMBERTY YVES ; MATAGNE ALAIN (BE); UCB SA (BE); WAEDEMANS TONY (BE);) 7 June 2001 (2001-06-07) page 11, line 26 - page 12, line 23 page 15, line 29 - page 16, line 20 claims -----	1-3,8-13
	-/-	

## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	DECKERS C L P ET AL: "Selection of antiepileptic drug polytherapy based on mechanisms of action: The evidence reviewed" EPILEPSIA 2000 UNITED STATES, vol. 41, no. 11, 2000, pages 1364-1374, XP009035157 ISSN: 0013-9580 the whole document -----	1-4,8-13
A		5-7
X	ZARNOWSKI TOMASZ ET AL: "NBQX: A selective AMPA antagonist enhances antiepileptic properties of common anticonvulsant drugs against maximal electroshock in mice" POLISH JOURNAL OF PHARMACOLOGY AND PHARMACY, vol. 44, no. SUPPL., 1992, pages 258-259, XP009035158 & XI CONGRESS OF THE POLISH PHARMACOLOGICAL SOCIETY AND OF THE GERMAN SOCIETY OF PHARMACOLOGY AND TOXI; GDANSK, POLAND; SEPTEMBER 16-19, 1992 ISSN: 0301-0244 the whole document -----	1-4,8-13
A		5-7
X	BOROWICZ KINGA K ET AL: "Interaction of GYKI 52466, a selective non-competitive antagonist of AMPA/kainate receptors, with conventional antiepileptic drugs in amygdala-kindled seizures in rats" POLISH JOURNAL OF PHARMACOLOGY, vol. 53, no. 2, March 2001 (2001-03), pages 101-108, XP009035159 ISSN: 1230-6002 the whole document -----	1-4,8-13
A		5-7
X	BOROWICZ KINGA K ET AL: "The non-competitive AMPA/kainate receptor antagonist, GYKI 52466, potentiates the anticonvulsant activity of conventional antiepileptics" EUROPEAN JOURNAL OF PHARMACOLOGY, vol. 281, no. 3, 1995, pages 319-326, XP002292362 ISSN: 0014-2999 the whole document -----	1-4,8-13
A		5-7
		-/-

## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	SWIADER MARIUSZ ET AL: "Influence of LY 300164, an AMPA/kainate receptor antagonist upon the anticonvulsant action of antiepileptic drugs against aminophylline-induced seizures in mice." POLISH JOURNAL OF PHARMACOLOGY, vol. 55, no. 1, January 2003 (2003-01), pages 103-107, XP009035160 ISSN: 1230-6002 the whole document -----	1-4,8-13
A	CZUCZWAR S J ET AL: "LY 300164, a novel antagonist of AMPA/kainate receptors, potentiates the anticonvulsive activity of antiepileptic drugs" EUROPEAN JOURNAL OF PHARMACOLOGY 1998 NETHERLANDS, vol. 359, no. 2-3, 1998, pages 103-109, XP002292363 ISSN: 0014-2999 abstract -----	5-7
X	WO 02/03915 A (KOZACHUK WALTER E) 17 January 2002 (2002-01-17) the whole document -----	1-4,8-13
A	WO 98/17692 A (HLYNIANSKI DANIEL RICHARD ; UNIV WALES BANGOR (GB)) 30 April 1998 (1998-04-30) cited in the application the whole document -----	
A	AUBERSON Y P ET AL: "N-phosphonoalkyl-5-aminomethylquinoxaline -2,3-diones: in vivo active AMPA and NMDA(glycine) antagonists" BIOORGANIC & MEDICINAL CHEMISTRY LETTERS, OXFORD, GB, vol. 9, no. 2, 18 January 1999 (1999-01-18), pages 249-254, XP004152611 ISSN: 0960-894X page 249 -----	
P,X	WO 03/042182 A (NOVARTIS PHARMA GMBH ; NOVARTIS AG (CH); SCHMUTZ MARKUS (CH)) 22 May 2003 (2003-05-22) the whole document -----	1-3,6-13

# INTERNATIONAL SEARCH REPORT

International application No.  
PCT/EP2004/003518

## Box II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1.  Claims Nos.: because they relate to subject matter not required to be searched by this Authority, namely:  

Although claim 9 is directed to a method of treatment of the human/animal body, the search has been carried out and based on the alleged effects of the composition.
2.  Claims Nos.: because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
3.  Claims Nos.: because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

## Box III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this International application, as follows:

1.  As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2.  As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3.  As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4.  No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

### Remark on Protest

- The additional search fees were accompanied by the applicant's protest.
- No protest accompanied the payment of additional search fees.

## INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/EP2004/003518

Patent document cited in search report		Publication date	Patent family member(s)		Publication date
CN 1265889	A	13-09-2000	NONE		
US 5095033	A	10-03-1992	EP	0501889 A2	02-09-1992
WO 8905642	A	29-06-1989	AU	2929489 A	19-07-1989
			EP	0346445 A1	20-12-1989
			JP	2502546 T	16-08-1990
			WO	8905642 A1	29-06-1989
GB 864536	A	06-04-1961	CH	374644 A	31-01-1964
US 3489836	A	13-01-1970	GB	1028234 A	04-05-1966
			BE	657925 A	05-07-1965
			NL	6500096 A	07-07-1965
EP 0637449	A	08-02-1995	IT	1261808 B	03-06-1996
			AT	161718 T	15-01-1998
			DE	69407684 D1	12-02-1998
			DE	69407684 T2	30-04-1998
			DK	637449 T3	25-05-1998
			EP	0637449 A1	08-02-1995
			ES	2111891 T3	16-03-1998
			GR	3025845 T3	30-04-1998
			HK	1005771 A1	22-01-1999
WO 0139779	A	07-06-2001	AU	773418 B2	27-05-2004
			AU	1524101 A	12-06-2001
			BG	106708 A	28-02-2003
			BR	0015974 A	23-07-2002
			CA	2392879 A1	07-06-2001
			CN	1402637 T	12-03-2003
			CZ	20021904 A3	13-11-2002
			EE	200200274 A	16-06-2003
			WO	0139779 A1	07-06-2001
			EP	1244456 A1	02-10-2002
			HU	0204023 A2	28-03-2003
			JP	2003515564 T	07-05-2003
			NO	20022585 A	25-07-2002
			SK	7492002 A3	04-02-2003
			ZA	200203690 A	19-08-2003
WO 0203915	A	17-01-2002	US	6191117 B1	20-02-2001
			AU	7325601 A	21-01-2002
			CA	2415760 A1	17-01-2002
			EP	1305034 A2	02-05-2003
			WO	0203915 A2	17-01-2002
WO 9817692	A	30-04-1998	AT	247133 T	15-08-2003
			AU	4709997 A	15-05-1998
			DE	69724144 D1	18-09-2003
			EP	0946597 A1	06-10-1999
			WO	9817692 A1	30-04-1998
			US	6455691 B1	24-09-2002
			US	2002137922 A1	26-09-2002
WO 03042182	A	22-05-2003	CA	2463970 A1	22-05-2003
			WO	03042182 A1	22-05-2003